

In the Claims:

Please amend the claims as follows (the changes in these claims are shown with ~~striketrough~~ for deleted matter and underlines for added matter). A complete listing of the claims with proper claim identifiers is set forth below.

1. (Withdrawn) An isolated polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO: 15, 17, or 19, wherein said polypeptide is characterized by high-level expression.
2. (Withdrawn) The isolated polypeptide of claim 1, wherein said polypeptide comprises an amino acid sequence set forth in SEQ ID NO:15, 17, or 19.
3. (Withdrawn) A composition comprising the polypeptide of claim 1.
4. (Withdrawn) A composition comprising the polypeptide of claim 2.
5. (Currently Amended) An isolated nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO: ~~44, 16, or~~ 18, wherein said nucleotide sequence encodes a polypeptide characterized by high-level expression.
6. (Currently Amended) The isolated nucleic acid molecule of claim 5, wherein said nucleotide sequence is selected from the group consisting of:
 - a) a nucleotide sequence comprising the sequence set forth in SEQ ID NO: ~~44, 16, or~~ 18; and,
 - b) a nucleotide sequence comprising the sequence encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: ~~15, 17, or~~ 19.
7. (Original) A DNA construct comprising the nucleic acid molecule of claim 5.
8. (Original) A DNA construct comprising the nucleic acid molecule of claim 6.

9. (Original) A vector comprising the nucleic acid molecule of claim 5.
10. (Original) A vector comprising the nucleic acid molecule of claim 6.
11. (Original) A cell comprising the nucleic acid molecule of claim 5.
12. (Original) A cell comprising the nucleic acid molecule of claim 6.
13. (Original) A cell comprising the vector of claim 5.
14. (Original) A cell comprising the vector of claim 6.
15. (Currently Amended) A method of producing a polypeptide comprising:
 - a) introducing into a cell a nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO: ~~14, 16, or 18~~, wherein said sequence encodes said polypeptide and said polypeptide is characterized by high expression; and
 - b) culturing said cell under conditions that allow expression of said nucleotide sequence.
16. (Currently Amended) The method of claim 15, wherein said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of:
 - a) a nucleotide sequence comprising a sequence encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: ~~15, 17, or 19~~; and
 - b) a nucleotide sequence comprising the sequence set forth in SEQ ID NO: ~~14, 16, or 18~~.
17. (Original) The method of claim 15 further comprising isolating said polypeptide.
18. (Original) The method of claim 16 further comprising isolating said polypeptide.

19. (Withdrawn) A method of increasing the level of expression of a factor VIII polypeptide in a cell comprising:

a) introducing into said cell a nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO: 14, 16, or 18, wherein said sequence encodes said factor VIII polypeptide and said factor VIII polypeptide is characterized by high expression;

b) culturing said cell under conditions that allow expression of said nucleic acid molecule.

20. (Withdrawn) The method of claim 19, wherein said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of:

a) a nucleotide sequence comprising a sequence encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 15, 17, or 19; and,

b) a nucleotide sequence comprising the sequence set forth in SEQ ID NO: 14, 16, or 18.

21. (Withdrawn) The method of claim 19 further comprising isolating said polypeptide.

22. (Withdrawn) The method of claim 20 further comprising isolating said polypeptide.

23. (Withdrawn) A method of treating a factor VIII deficiency comprising administering to a subject in need thereof a composition comprising a therapeutically effective amount of a polypeptide, wherein said polypeptide comprises an amino acid sequence having at least 85% sequence identity to SEQ ID NO: 15, 17, 19 and said polypeptide is characterized by high-level expression.

24. (Withdrawn) The method of claim 23, wherein said wherein said polypeptide comprises an amino acid sequence set forth in SEQ ID NO: 15, 17, or 19.

25. (Withdrawn) A method of treating a factor VIII deficiency comprising administering to a subject in need thereof a composition comprising a therapeutically effective amount of a nucleic acid molecule, where said nucleic acid molecule comprises a nucleotide sequence having at least 85% sequence identity to SEQ ID NO: 14, 16, or 18, wherein said nucleic acid molecule encodes a factor VIII polypeptide, characterized by high-level expression.

26. (Withdrawn) The method of claim 25, wherein said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of:

- a) a nucleotide sequence comprising the sequence set forth in SEQ ID NO: 14, 16, or 18; and,
- b) a nucleotide sequence comprising a sequence encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 15, 17, or 19.

27. (New) An isolated nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO.: 14 or 16, wherein said nucleotide sequence encodes a polypeptide characterized by high-level expression.

28. (New) The isolated nucleic acid molecule of claim 27, wherein said nucleotide sequence is selected from the group consisting of:

- a) a nucleotide sequence comprising the sequence set forth in SEQ ID NO.: 14 or 16; and
- b) a nucleotide sequence comprising the sequence encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO.: 15 or 17.

29. (New) A method of producing a polypeptide comprising:

- a) introducing into a cell a nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO.: 14 or 16, wherein said sequence encodes said polypeptide and said polypeptide is characterized by high expression; and
- b) culturing said cell under conditions that allow expression of said nucleotide sequence.

30. (New) The method of claim 29, wherein said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of:

- a) a nucleotide sequence comprising a sequence encoding a polypeptide comprising the amino acid sequence set forth in SEQ ID NO.: 15 or 17; and
- b) a nucleotide sequence comprising the sequence set forth in SEQ ID NO.: 14 or 16.

31. (New) A DNA construct comprising the nucleic acid molecule of claim 27.

32. (New) A DNA construct comprising the nucleic acid molecule of claim 28.

33. (New) A vector comprising the nucleic acid molecule of claim 27.

34. (New) A vector comprising the nucleic acid molecule of claim 28.

35. (New) A cell comprising the nucleic acid molecule of claim 27.

36. (New) A cell comprising the nucleic acid molecule of claim 28.

37. (New) A cell comprising the vector of claim 27.

38. (New) A cell comprising the vector of claim 28.

39. (New) The method of claim 29 further comprising isolating said polypeptide.

40. (New) The method of claim 30 further comprising isolating said polypeptide.

CLAIM STATUS

Claims 1-4 are withdrawn from prosecution.

Claims 5, 6, 15, and 16 are amended herein by deleting reference to restricted sequences from these claims. No new matter is added by amendment of claims 5, 6, 15, and 16.

New Claims 27-40 have been added. No new matter is added by new claims 27-40 and support for these claims may be found at least in original Claims 5-18.

Claims 5-18, and 27-40 are currently pending in this application.

RESTRICTION REQUIREMENT

The Office Action sets forth a requirement for restriction between the following:

- Group I. Claims 1-4, drawing to an isolated polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO:15, classifiable in class 435, subclass 69.1.
- Group II. Claims 1-4, drawn to an isolated polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO:17, classifiable in class 435, subclass 69.1.
- Group III. Claims 1-4, drawn to an isolated polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO:19, classifiable in class 435, subclass 69.1.
- Group IV. Claims 5-18, drawn to an isolated nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO:14, vectors, and cells comprising said nucleic acid molecule, and a method of making a polypeptide following expression of said isolated nucleic acid molecule, classifiable in class 536, subclass 23.1.
- Group V. Claims 5-18, drawn to an isolated nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO:16, vectors, and cells comprising said nucleic acid molecule, and a method of making a polypeptide following expression of said isolated nucleic acid molecule, classifiable in class 536, subclass 23.1.
- Group VI. Claims 5-18, drawn to an isolated nucleic acid molecule comprising a nucleotide sequence having at least 85% sequence identity to SEQ ID NO:18, vectors, and cells comprising said nucleic acid molecule, and a method of making a polypeptide following expression of said isolated nucleic acid molecule, classifiable in class 536, subclass 23.1.
- Group VII. Claims 19-22, 25, and 26, drawn to a method of treating a factor VIII deficiency in a subject, comprising administering a nucleic acid

- molecule having at least 85% sequence identity to SEQ ID NO:14, classifiable in class 514, subclass 44.
- Group VIII. Claims 19-22, 25, and 26, drawn to a method of treating a factor VIII deficiency in a subject, comprising administering a nucleic acid molecule having at least 85% sequence identity to SEQ ID NO:16, classifiable in class 514, subclass 44.
- Group IX. Claims 19-22, 25, and 26, drawn to a method of treating a factor VIII deficiency in a subject, comprising administering a nucleic acid molecule having at least 85% sequence identity to SEQ ID NO:18, classifiable in class 514, subclass 44.
- Group X. Claims 23 and 24, drawn to a method of treating a factor VIII deficiency in a subject, comprising administering a polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO:15, classifiable in class 514, subclass 2.
- Group XI. Claims 23 and 24, drawn to a method of treating a factor VIII deficiency in a subject, comprising administering a polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO:17, classifiable in class 514, subclass 2.
- Group XII. Claims 23 and 24, drawn to a method of treating a factor VIII deficiency in a subject, comprising administering a polypeptide comprising an amino acid sequence having at least 85% sequence identity to SEQ ID NO:19, classifiable in class 514, subclass 2.